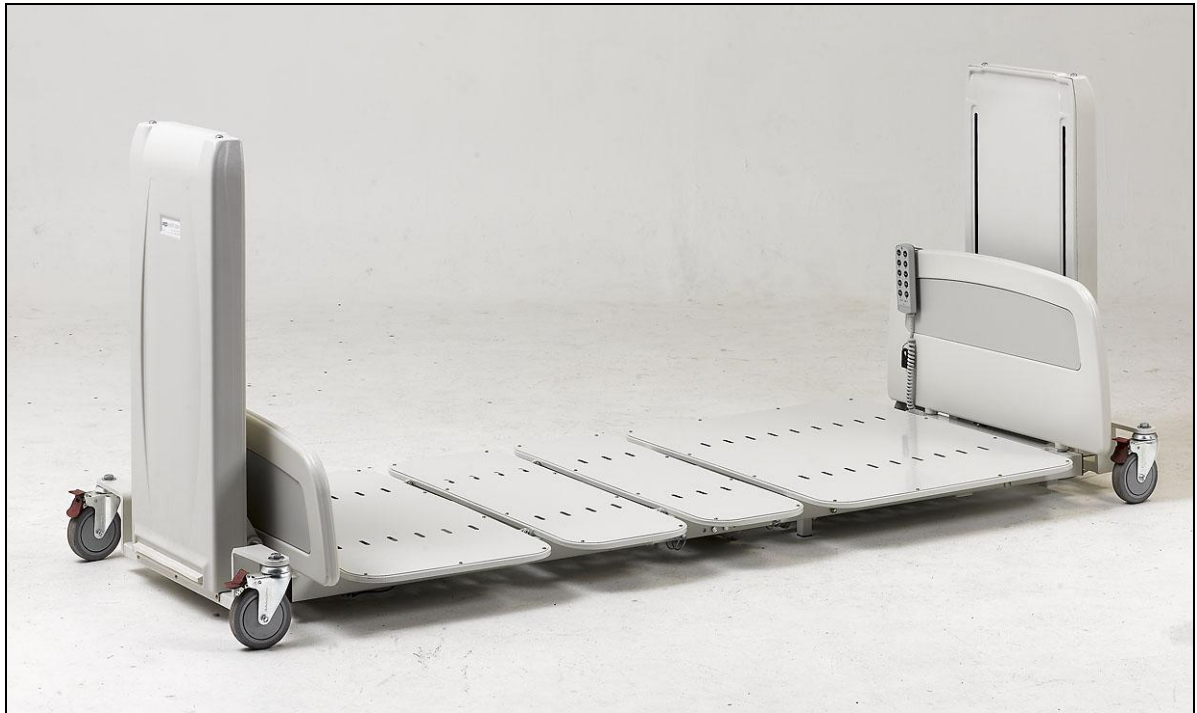


***FR115<sup>®</sup> Falls Resistant Bed***



**User Guide**

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## **Warnings, Cautions and Notes**

This user guide is designed to enable the reader to competently and responsibly operate the **FR115<sup>®</sup> Bed**.

This manual **must** be read in its entirety prior to operating the **FR115<sup>®</sup> Bed**.

This manual **must** be kept in an easily assessable area for future reference.

**All** warnings, cautions and notes **must** be strictly adhered to. Failure to comply with this guide may result in harm to either patient or caregiver.

ArjoHuntleigh product specialists can provide training in addition to this handbook if required. Please contact 1800 072 040 to arrange an appointment.

**Warnings** given in this manual identify possible hazards in procedures or conditions, which if not correctly followed, could result in death, injury or other serious adverse reactions.

**Cautions** given in this manual identify possible hazards in procedures or conditions, which if not correctly followed, could result in equipment damage or failure.

**Notes** given in this manual (indicated by  ) are used to explain or amplify a procedure or condition.

### **General Warnings**

#### **WARNING**

**Do not use accessories that have not been designed or approved for use with the bed.**

**Electrical equipment can be hazardous if misused.**

**Do not use electrically powered beds in the presence of flammable gases such as anaesthetic agents.**

**Do not use electrically powered beds in operating theatres.**

---

# 1. Introduction

---

The **FR115<sup>®</sup> Bed** an ultra low height (Floorline) electric adjustable bed suitable mainly for aged care use where there is a risk of falling out of bed, however, owing to its versatile design, it is also suitable in acute care environments where the Trendelenburg/Reverse Trendelenburg position is required and can be used to simulate a recliner position as well.

Stainless Steel glide tubes and Nylon bushes ensure smooth and quiet operation.

Materials used are non-porous for ease of cleaning. It is ergonomically designed and addresses various OH&S issues by reducing the amount of manual handling required.

## STANDARD FEATURES

- Electric Hi-Lo.
- Electric Backrest with Auto-Retraction and Splined Actuator for safety.
- Electric Trendelenburg/Reverse Trendelenburg (Head/Foot tilt)
- Toe Brake Total Lock Castors - 125mm.
- Drop in Head & Foot boards.
- Smooth and contoured surfaces powder coated for infection control
- Auto contour handset.

## OPTIONAL FEATURES

- Electric Knee break with Splined Actuator for safety
- Emergency Release Backrest

## OPTIONAL ATTACHMENTS

- Self Help Pole
- I.V. pole

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## 2. Clinical Applications

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**Area of use**

Private, nursing and convalescent homes.

**Indications**

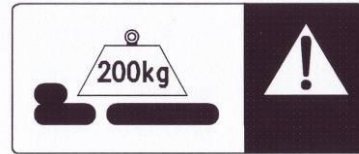
The use of the bed is to assist in patient positioning whilst reducing lifting and handling stresses for the carer.

The four section deck allows the patient to be moved to an upright sitting position with the knees supported or legs elevated

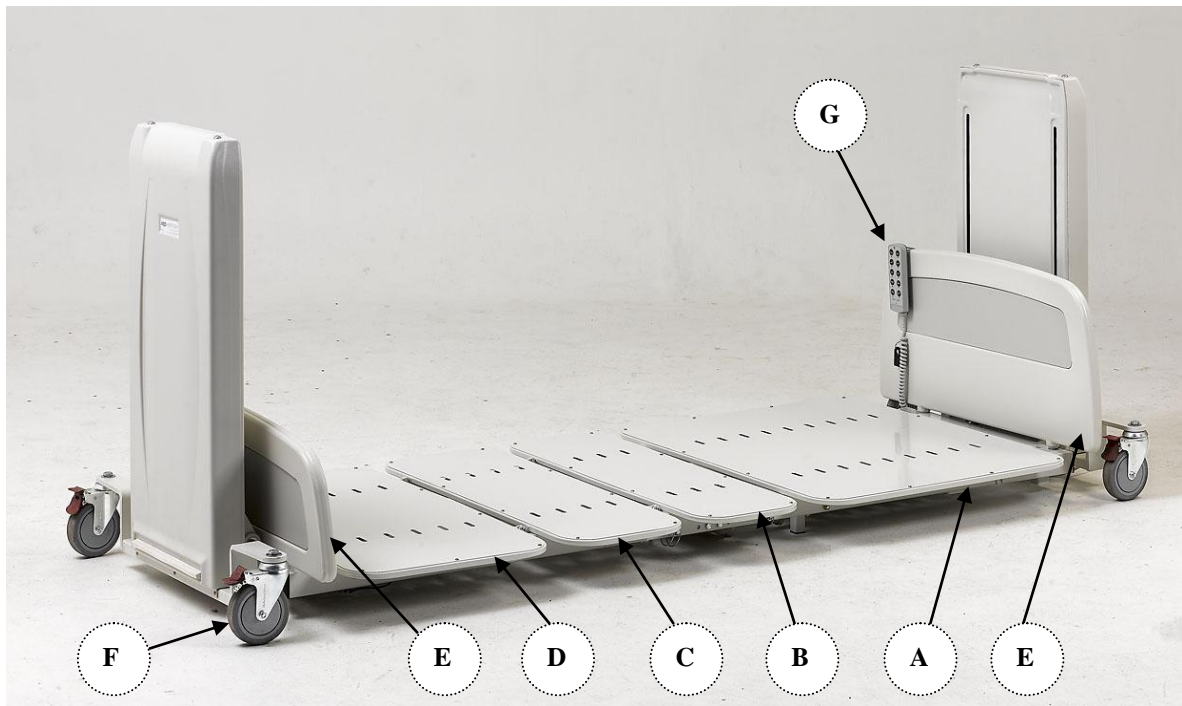
**Contra-indications**

The total safe working load of the bed is 200 kg.

(Combined weight of patient, mattress and accessories)



### 3. General layout



**FIGURE 1**

A	Backrest Frame
B	Hip Frame
C	Thigh Frame
D	Calf Frame
E	Head / Foot Panels
F	Castors
G	Handset

## 4. Assembly

Check that you have the following parts:

4 x Socket Screws: M10 x 25

12 x Washers 10 ID x 25 OD

Make sure there is sufficient space for bed to un-fold before commencing with assembly procedure.

### WARNING

**Make sure that the coiled electrical power cable is not stretched excessively.**

**Make sure that handset cables and electrical supply cables cannot become entangled with moving parts of the bed.**

**Disconnect the electrical power cable from the mains and store before transporting the bed.**

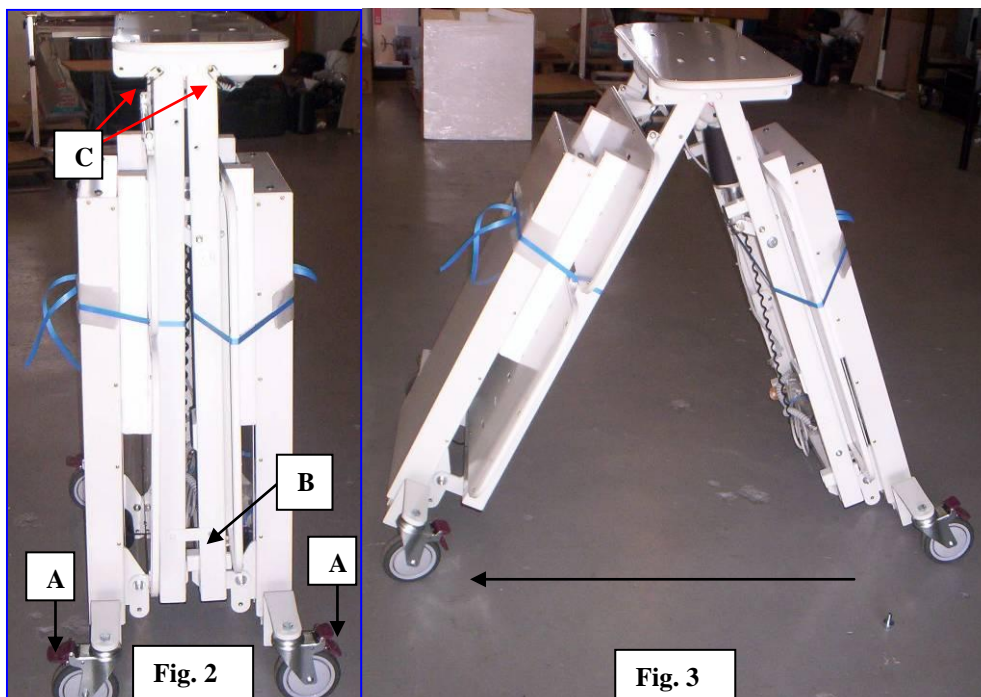
**If the power cord shows any sign of damage, replace immediately.**

### WARNING

**This bed is heavy and appropriate precautions should be taken to avoid injury during assembly process**

The FR115 Bed is delivered in its folded position.

While it can be assembled by a single person, it is preferably a two person task.



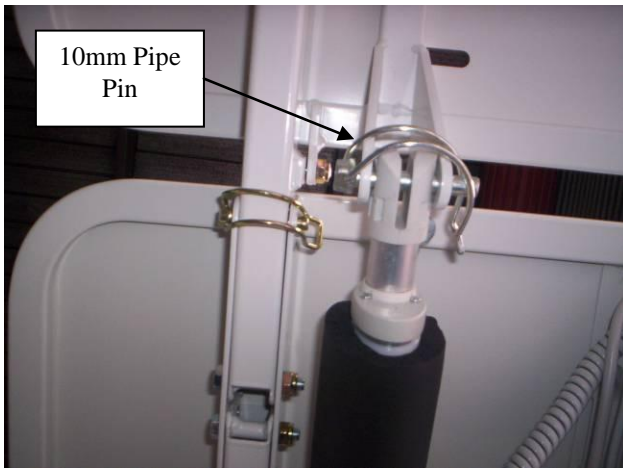
1. Remove the packaging and place the bed on its wheels with the straps still fastened. Apply the brakes on all four castors. (A)
2. Undo the transport latch (B) on both sides of bed.
3. Remove Pipe Pins (C) from inner holes in hinging saddle and keep them nearby to be inserted in outer holes after bed is assembled.
4. Release the brakes from both wheels on one end of the bed (Preferably foot end) and carefully roll it away from the fixed wheels till the bed resembles an 'A' shape. (See Fig 3) Then reapply the brakes. (Note: Excessively wide position can cause wheels to slip on the floor.)
5. Undo the strap from one end of the bed and fold the end column outward at 90 degrees to the bed frame (see Fig. 4) and fasten with the M10 socket screws supplied. (Fig 6) Place the supplied washers/spacers over each screw for proper engagement.



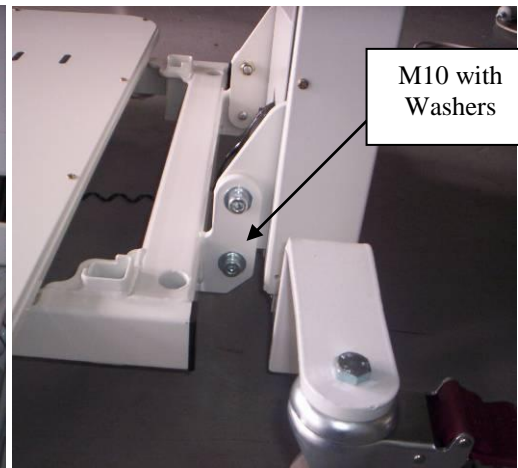
**Fig. 4**

6. Repeat the process with the other end so the bed resembles a 'W'.
7. Hold the central hinging panel (Hip Frame) firmly to support the weight of the bed. Then release the brakes on the foot end and slowly lower the bed till it is flat on the floor in the low height position.
8. Connect the power cord to a mains outlet (240V) and release the magnetic lock in the Handset (Pendant) by swiping the magnetic key (Fig. 7) over the lock symbol.
9. Raise the bed by depressing the 'bed up' button (Fig. 7) and then re-insert the 8mm pipe pins in the outer holes of the hinging saddle.
10. Attach the knee bend actuator to the thigh frame by inserting the 10mm pipe pin as shown in (Fig. 5).
11. Tighten the M10 socket screws (Fig. 6) using the Allen Key supplied.





**FIG. 5**



**Fig. 6**

## **Disassembly**

Disassembly of the bed is the reversal of the above steps.

---

## 5. Operation

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### Pre- Operation Check

Move the bed into the position where it is going to be in operation. Allow for a 50mm to 75mm gap between bed head end and the wall. Connect the mains plug to the 240V supply.

Take up the excessive length of the power supply cable and attach the excess cord to the head end bar with a cable tie if necessary.

### **WARNING**

**Ensure the cord has enough slack when connected so that it is not stretched when the bed is operated or moved to enable cleaning under it**

**Prevent the cord from getting under the wheels or entangling in the moving parts of the bed as damage to the mains cord may cause the bed to become live.**

### Safety

- Always use a mattress of the correct size and type. A range of suitable pressure reducing and pressure relieving mattresses is available from ArjoHuntleigh.
- When the bed is operated, make sure that obstacles such as bedside furniture do not restrict movement.
- Before operating the bed, make sure that the patient is safely positioned to avoid entrapment or imbalance.
- Before moving the bed, make sure that the bed is at a suitable height for the attendants to move the bed without stooping or straining.

### **WARNING**

**When the patient's condition could lead to patient entrapment, the mattress support platform should be left in the flat position whilst unattended.**

- Always apply the brakes when the bed is stationary. When operating the bed in tilt mode, apply the brakes at one end only.

### **WARNING**

**Lower the bed to minimum height when the patient is left unattended to reduce the risk of injury due to falls whilst getting into or out of the bed, or whilst lying on the bed**

### **WARNING**

**The clinically qualified person responsible should consider the age, size and condition of the patient before using the bed or safety sides.**

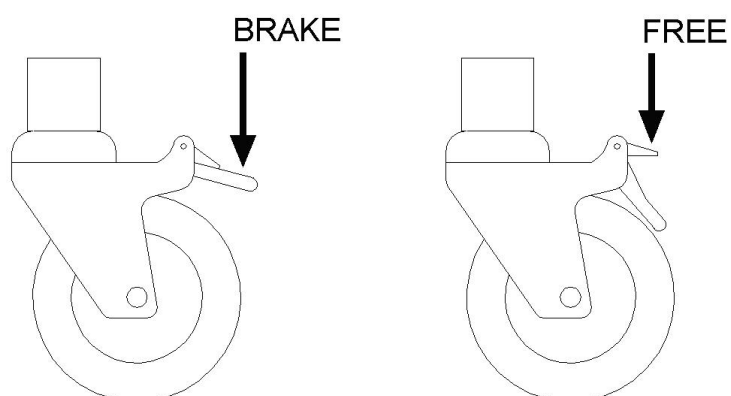
## WARNING

Always ensure that all hospital lines and power cables are free from possible entanglement with mechanical parts of the bed.

Always ensure that attendant and patient limbs are free from potential entrapment areas before operating any functions.

- Do not expose the equipment, especially the mattress, to naked flames such as cigarettes etc.
- Use only ArjoHuntleigh accessories designed or approved for use with the bed.
- Keep these instructions handy for reference.

## Brakes



## Power Operation

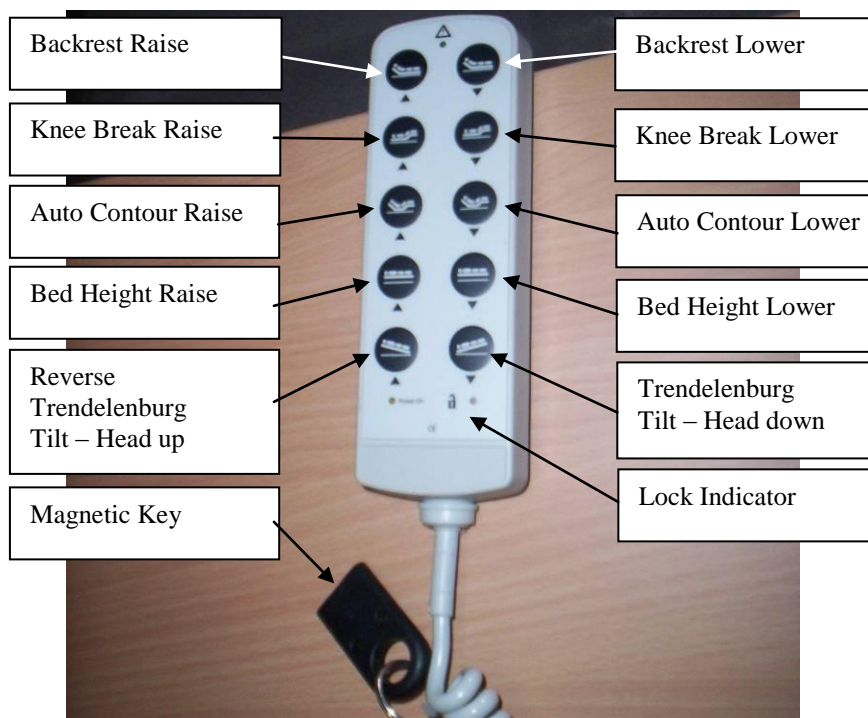


FIG. 7

The bed height, backrest angle, Trendelenberg tilt angle and leg elevation functions are all electrically operated using control handset. To operate a function, press and hold the appropriate pushbutton until the desired position is achieved. To stop at the required position release the button. The Auto-contour button operates both backrest and leg elevation simultaneously.

### **WARNING**

**Some functions may cause injury to the patient if unintentional movement occurs. ArjoHuntleigh strongly recommends that handset is locked out when no movement of bed functions is required by activating Magnetic handset lockout feature.**

### **WARNING**

**If the Handset sustains any damage or suspected damage in any way, immediately stop using the Handset, apply magnetic lockout function and perform the full Handset Checks as detailed in Section 7 - Maintenance.**

To operate the bed press and hold the button as indicated in Fig 7 above until the bed reaches the desired height or angle.

The top two buttons control the backrest descent.

The next two controls control knee break adjustment.

The third set of buttons (as pictured) are optional and operate the backrest and knee break simultaneously, otherwise known as auto contour.

The fourth two buttons control the height of the bed. (High low function.)

The last two buttons operate the Trendelenburg or Head / foot tilt function.

Each time the electricity supply is disconnected the Function Lock engages by default rendering all functions inactive. To re-enable the functions swipe the magnetic key past the lock icon on the handset (Fig 7) and the indicator light will reflect the status.

If it becomes necessary to deactivate bed functions, swipe the magnetic key past the lock icon again.

The Magnetic key should remain in the possession of the carer or supervising staff if the occupant of the bed is not in control of all their faculties.

**(Refer to Fig 8. for Acute Care Bed Handset features)**

### **WARNING**

**Depending on the clinical condition of the patient, it is strongly recommended that the Trendelenburg function is locked out via magnetic handset lockout feature.**

## **Acute Care Bed model**

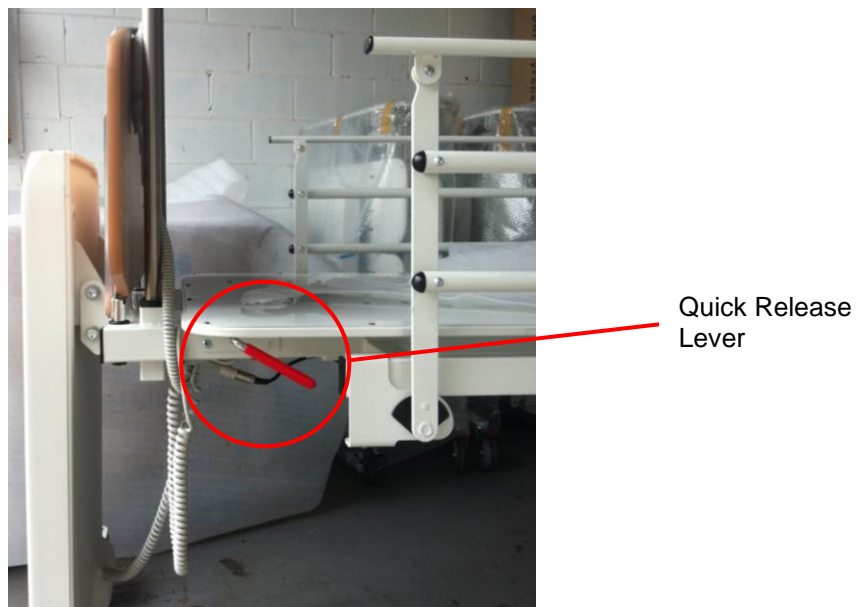
### **Emergency Release Backrest.**

This bed is fitted with an emergency release lever so that the backrest may be quickly lowered to the horizontal position in the event of a requirement to perform CPR. Some support is required when the back rest is released to ensure controlled descent.

To operate the emergency release when the backrest is in the upright position, grasp the backrest panel and the red Emergency Release lever with one hand and squeeze the red lever towards the backrest panel. (Circled below in figure 9) As the back rest becomes free, lower it to its resting position.

The quick release lever is located on both sides of the back rest so as to enable it to be operated from either side of the bed.

Once in the lowered position, the back rest may be operated normally using the hand control.



**Fig. 9**

## **Patient Transfer**

If the patient is to be transferred by means of a patient hoist, the bed will need to be raised enough to allow hoist access underneath the bed.

### **WARNING**

**Bed functions, particularly Hi-Lo are NOT to be used during patient transfer.**

## 6. Cleaning

### WARNING

**Disconnect the bed from the mains power supply before cleaning.  
Gloves and protective clothing should always be worn when carrying out  
cleaning procedures.**



*These instructions also apply to accessories but not to mattresses.*

Wipe all surfaces with a soft cloth moistened with hot water and mild detergent (or the hospital's recommended cleaning solution). Take extra care with areas that may harbour dirt or dust.

Rinse with clean water and dry with paper towels.

To remove potentially infectious material such as body fluids, or when the bed has been used by someone with a known infection, clean afterwards with NaDCC (e.g. Presept, Actichlor) at 10,000 ppm of available chlorine. Rinse and dry.

Allow the cleaned parts to dry before replacing the mattress.

### Caution

**Do not use abrasive compounds or pads.  
Do not use hypochlorite or phenolic cleaning solutions.**

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## 7. Maintenance / Troubleshooting

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The following preventive maintenance procedures should be carried out at intervals of 6 and 12 months.

All service or repair activities must only be performed by properly qualified and trained persons who are approved by ArjoHuntleigh.

Disposal of product and components should be compliant with local regulations.

### **WARNING**

**Disconnect the bed from the mains power supply before starting any maintenance activity.**

**Avoid skin contact with lubricants.**

#### ***General 6 month Routine Maintenance***

- Examine flexible cables for cuts, abrasions, kinking or other deterioration. Make sure that the electrical supply cable plug is not damaged.
- Check that wiring is secure and not interfering with bed movement.
- Wipe external actuator shafts to remove dust and lint. (Do not wash)
- Check that all bed functions are operating correctly.

#### ***General 12 Routine Maintenance***

- Examine the bed for obvious signs of damage. All aspects of the equipment should operate as intended.
- Make sure all nuts, bolts and other fastenings are tight and are not missing. Check all pivot points for significant wear or any damage.

#### ***Castors and Brakes***

- Apply the brakes and push the bed forwards. If any of the castors braking is inefficient then they should be replaced.
- Check that castors swivel and rotate freely.
- Remove any fluff or threads picked up by the castors.

#### ***Lifting Poles***

- Examine the handle and strap for signs of damage, fraying or loose stitching. Replace the strap and handle if either are faulty.

## HANDSET Checks

Between each patient, ArjoHuntleigh strongly advises that the Handset is visually inspected for obvious damage before each use if practicable and that Preventative Maintenance checks are conducted on the handset. When using a specific function staff should be aware of, and checking for, any of the symptoms listed in point 3 below.

### Preventative Maintenance Checks

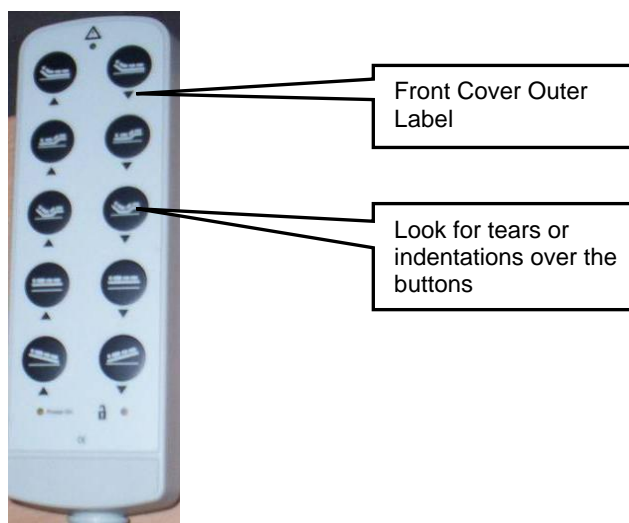
ArjoHuntleigh recommends that the full check and testing regime is conducted between each bed use or worst case during annual Preventative maintenance. This should take no more than one (1) minute to complete.

## WARNING

**Although preventative maintenance checks may identify damaged or faulty handsets which could lead to unintentional bed movement, ArjoHuntleigh strongly recommends that handset is locked out when no movement of the bed functions is required. This is done by swiping magnetic key over lock icon on handset. (Operation page)**

### 1. Visual inspection of handset casing

- 1.1 Inspect the outer plastic casing for any obvious cracks or damage.
- 1.2 Inspect for damage to the front cover (outer label) particularly over the buttons where the label may be torn or indented.



If any damage is identified while conducting checks 1.1 and 1.2, immediately quarantine the bed and report the damage to maintenance staff or replace the Handset.

### 2. Visual inspection of the cable and Cable insulation:

- 2.1 Inspect the cable for any nicks or cuts in the insulation
- 2.2 Inspect for any evidence that the cable may have been squashed or flattened.

Squashed or flattened cables may indicate a possible break in the internal conductors or insulation causing conductors to short together which could cause unwanted movement of the bed. Any handsets are found with obvious damage to the cable insulation, immediately report the damage to maintenance staff or replace the Handset.



### 3. Tactile inspection of the buttons:

All buttons and magnetic locking function should be operated and response tested.

Depress each button on the handset. Each button should have a positive audible click that is also felt. The function being pressed should also operate.

If the button:

- does not have a click feel
- does not have an audible click sound
- does not immediately operate the function
- feels soft offering no resistance
- feels different to the rest of the buttons
- travels further when depressed

Immediately quarantine the bed and report the damage to maintenance staff or replace the Handset, otherwise contact an ArjoHuntleigh approved Technician.

## Troubleshooting

Symptom	Possible Cause	Action
All actuators fail to work	Handset is locked	Swipe magnetic key across handset to activate.
	Control box and handset plugs disconnected	Check the plugs are fully inserted in the control box.
	Blown fuse	Contact ArjoHuntleigh Service Department on 1800 072 040.
	Damaged handset cable	Replace handset
One actuator fails to work	Actuator plug disconnected	Check that actuator plug is fully inserted in control box.
	Damaged actuator cable	Contact ArjoHuntleigh Service Department on 1800 072 040.
Brakes not affective	Wear or damage	Clean or replace castor.

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## 8. Accessories

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A full range of accessories, including mattresses, are available from ArjoHuntleigh. Details are available on request.

The following list of available accessories may be used on the **FR115<sup>®</sup>** bed range:

DESCRIPTION	PRODUCT CODE	USER MANUAL REFERENCE	SAFE WORKING LOAD (NOT TO BE EXCEEDED)
Self Help Pole	SHP-SS38	UMSHP01	76.5kg
IV Pole	93011755	UMIV01	10kg

**WARNING**

**Do not use accessories that have not been designed or approved for use with the bed.**

ArjoHuntleigh reserves the right to change accessory details and availability without notification.

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## 9. Warranty and Service

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ArjoHuntleigh's standard terms and conditions apply to all sales. A copy is available on request. These contain full details of warranty terms and do not limit the statutory rights of the consumer.

For service, maintenance and any questions regarding this, or any other ArjoHuntleigh product, please contact:

ArjoHuntleigh  
78 Forsyth Street,  
O'Connor, Western Australia

Free Call: 1800 072 040  
Telephone: +61 (0) 8 9337 4111  
Fax: +61 (0) 8 9337 9077

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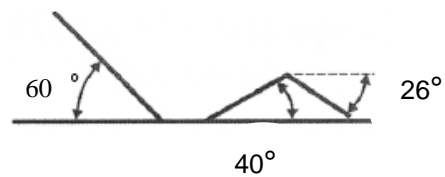
## 10. Dimensions and Data

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### Dimensions

Overall length	230 cm
In-bed length	198 cm
Overall width	90 cm
Height to mattress platform	
125 mm castors	11.5 to 71.5 cm
Backrest Retraction	6.5cm
Trendelenburg tilt	0 to 16°
Reverse Trendelenburg tilt	0 to 16°

Deck angles (max.)



**Any mattress used on this bed must be within the following dimensions:**

Width	860mm
Length	1980mm
Depth	Min 125mm Max 170mm

**Product weight (approx.)**

112kg

**Transport Dimensions**


122cm x 90cm x 50cm

**Safe working load**

200 kg



## Electrical Data (230V)

Power in	100-240V~50/60Hz. 3,15A max.
Power out	29V DC constant
Duty rating	Intermittent 10%, Max. 2min. / 18 min.
Electrical Safety Standard	EN 60601-1 / EN60635 / norm UL, cUL
Electric shock protection	Class 2 
Liquid ingress protection	IPX6

## SYMBOLS



Refer to User Manual



Safe Working Load - Bed



Double insulated

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## 11. Transportation and Storage

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Handle with care. Do not drop. Avoid shock or violent impact.

The equipment should be stored in a clean, dry and well ventilated area.

The following limits apply during transport and for a storage period of up to 15 weeks:

Ambient temperature	-25°C to +70°C
Relative humidity	10% to 75%
Air pressure	50 kPa to 106 kPa

The following limits apply to Normal Operating Conditions **OR** periods of storage longer than 15 weeks:

Ambient temperature	+10°C to +40°C
Relative humidity	30% to 75%
Air pressure	70 kPa to 106 kPa

## 12. Risk Assessment

### HOSPITAL BED HAZARD & RISK ASSESSMENT

Hazard	Hazard? Yes / No	Level of Risk	Suggested Actions To Minimise Risk
<b>Mechanical</b> Entanglement, crushing, cutting, abrasion, puncture.	Yes	Medium	The bed is designed in accordance with AS/NZS 3200.2.38: 1997 which should prevent injuries during normal use. However, to prevent accidents when a person may be under the bed or may have a limb between the mechanisms when the bed is being operated, a warning of the danger has been placed on the bed frame and also in the operating instructions.
<b>Ergonomic</b> Height, size and human fit.	Yes	Low	The Mattress platform size has been designed to accommodate most people, however, it may not be suited to individuals over 190cm. The bed is also not designed for people over 170kg.
<b>Electrocution</b> Risk to operator, occupant	Yes	Low	All electric equipment is double insulated. All motors and circuits other than the mains to the control box are low voltage. In the event of a fire the power cord could melt and cause the bed to become live. Damage to the power cord or entanglement in the mechanism of the bed can pose a risk. A warning to this effect is included in the operating instructions.
<b>Hazardous Substance</b> Chemical/ Radioactive	No	None	
<b>Temperature</b>	No	None	
<b>Noise</b> Excessive Noise	No	None	
<b>Pressure Equipment</b> Fluids/Gases	No	None	
<b>Infection Control</b> Is Equipment easily cleaned?	Yes	Low	All metal surfaces in contact with patients or staff are powder coated for ease of cleaning. All efforts have been made to minimise areas which can trap fluids, etc.
<b>Service</b> Hazard due to lack of maintenance.	Yes	Low	After extended periods of continuous use without maintenance, the bed may fail under load. Servicing information is provided in the operation manual.
<b>Fire / Excessive Temperature.</b> Combustion Source Present?	No	Low	The bed is mostly made of metal and is unlikely to ignite. However should a fire occur, the heat may melt the power cord causing the bed to become live.

## 13. Parts List

### Electrical Components (Standard model)

### Supplier's Part No

Main lift Actuator .....	AC-67829 BetaDrive 1.5kN 600mm
Backrest Actuator .....	AC44-56060 MCZ 70mm
Knee break Actuator.....	AC19-75175 ADZ 50mm
Control Box (4 & 2 Section).....	CB-70167 MCL2 eco D2 4 Channel
Control Box (4 Battery backup).....	CB-69031 MCL2 SMPS 4 Channel Bat
Mains Cable – Control Box.....	CA-73941 MCL2 AUS 4M Straight, Earth
Battery Backup.....	CB-49064 AG7 Battery Backup 1.2AH
Battery Mount Plate.....	SP-47204 AG7 Battery Mounting Plate
Handset (4 Section).....	HS-51518-SE Iprox 10 Button with SE locks all
Handset (2 Section).....	HS-63159-SE Iprox SE 6 button (Modified)
Extension Cable 1M .....	CA-51983 1 Metre
Magnetic Key .....	SP-43092

### Electrical Components (Acute Care Bed model)

Backrest Actuator .....	AC-53274-ER Mod:AC53274, 286 70mm
Controller Box (4 Section Battery).....	CB-69031 MCL2 SMPS 4 Channel Bat

### Mechanical Components

Backrest frame .....	008210
Backrest sheet.....	008201
Torsion Bar.....	008213
Limit Bar.....	008217
T-Bar.....	008275
Transport Latch.....	008273
Hip Frame.....	008220
Hip sheet .....	008202
Thigh frame .....	008230
Thigh Sheet.....	008203
Calf frame.....	008235
Calf sheet .....	008204
Column Base .....	008240
Travel Bar – Colum .....	008250
Bed Frame – Head End .....	008260
Bed Frame – Foot End .....	008270
Castor (Toe brake) .....	125 mm T/B – T/B
Castor (Toe brake) .....	125 mm T/B – D/L
Castor (Toe brake) .....	150 mm T/B – T/B
Castor (Toe brake) .....	150 mm T/B – D/L
Pipe Linch Pin – 10mm .....	S12799



Pipe Linch Pin – 8mm .....	S12795
Bolt 45mm – Column Assy .....	10X45MZPSCS
Bolt 50mm– Column Assy .....	10X50MZPSCS

**Mechanical Components** (Acute Care Bed model)

Quick Release Lever .....	008280
QR Lever Mount Brackets.....	008283
Tension Spring – QR Lever .....	SSTSQR

**Panels & Covers**

Timber Head/Foot Panel .....	930021
Timber Head/Foot Panel Frame.....	LHSUB018
Plastic Head/Foot Panel.....	ASM9464
ABS Column Cover - Standard.....	008245
ABS Column Cover – Delta Wings .....	008245-D

Manufactured on behalf of ArjoHuntleigh by  
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 Victoria 3175 Australia

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Website: [www.arjohuntleigh.com](http://www.arjohuntleigh.com)

**PERTH – ADELAIDE – MELBOURNE – SYDNEY – BRISBANE**

As our policy is one of continuous development ArjoHuntleigh reserves the right to  
change specifications without notice.

ArjoHuntleigh (ABN 75 007 200 900)  
Member of the Getinge Group